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ABSTRACT

The concept of the junior college is spreading rapidly throughout the world. Statistics show that educational development is positively correlated with economic development, yet educational systems often have not kept pace with technological, social, and economic developments since World War II. Junior colleges, with their flexibility of function, may be able to provide the necessary increase in educational opportunities in order to increase the middle-level manpower. Australia has recently opened several Colleges of Advanced Education to provide non-university tertiary education. Canada has junior colleges in six provinces. Great Britain has technical colleges giving occupational preparation, and sixth-form colleges giving two years of university preparation. In Japan, most junior colleges are private women's colleges. Junior university colleges in Ceylon are designed to educate students who cannot get into universities. Chile was the first Latin American nation to use junior colleges to train technical manpower. Colombia also has a developing junior college system. There are plans for the establishment of a junior college system in Kenya. Many nations have not initiated the junior college, possibly because it is not appropriate to their present stage of development. (MS)

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THE JUNIOR COLLEGE

IN

INTERNATIONAL PERSPECTIVE

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TOPICAL PAPERS

1) A Developmental Research Plan for Junior College Remedial Education, July 1968.

2) A Developmental Research Plan for Junior College Remedial Education
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3) Student Activism and the Junior College Administrator: Judicial Guidelines, December 1968.

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7) A Developmental Research Plan for Junior College Remedial Education
Number 3: Concept Formation, August 1969.

8) The Junior College in International Perspective, January 1970.

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PREFACE

There are many points of view on the junior college in international perspective. One could be on the role of junior colleges in teaching subject matters that are international in nature and would include the teaching of all courses in world or national perspectives. Another study might consist of the extent of junior college involvement in foreign student education. A third might be the development of overseas programs for American students abroad. All would be valid interests for the international educator concerned with the role of the junior college.

This study is concerned with a still different viewpoint, the export of the junior college concept and the development of institutions serving similar functions in other nations. Not all examples of foreign junior colleges are included in this study, nor are all institutions in this study junior colleges in the same sense as they are known in the United States. Of the nations studied, only two (Canada and Japan) call their schools "junior colleges." Some of the remaining nations have studied the junior college sympathetically, while others perhaps would resent being asked even to consider it.

A note of caution might be added. While it is easy to cite cases of junior colleges developing elsewhere, one must be careful to place them within their global perspective, realizing that they are only a small portion of the innovation occurring in international education. While it is still too early to assume that the international junior college will flourish, the expansion of the junior college concept overseas should be noticed and recorded. Since 1970 is designated "International Education Year" by the United Nations, it is both necessary and appropriate at this time to evaluate the international position of the junior college movement.

THE JUNIOR COLLEGE AS AN INTERNATIONAL INSTITUTION

In 1901, the first public junior college in the United States was opened in Joliet, Illinois. It was planned as a two-year extension of the high school and designed as a means of eliminating the need for teaching secondary-level courses in the university. As the junior college concept spread, it began to be considered as an institution that could also provide education for those not going on to a four-year institution. The desire to provide opportunities for such students led to the development of occupational programs in the junior college. Programs in both technical and general education, aimed directly at specific vocations, expanded after 1920, adding another dimension to the concept.

Concern for community and adult educational needs added still another dimension to the junior college and the idea of the "community college" came into being. This new concept was a product of years of development and was described by Nicholas Ricciardi in the first issue of the Junior College Journal:

> A fully organized junior college aims to meet the needs of a community in which it is located, including preparation for institutions of higher learning, liberal arts education for those who are not going beyond graduation from the junior college, vocational training for particular occupations,...and short courses for adults with special interests (24:24).

Today in the United States, the community college enrolls about 2,000,000 students in 1,000 colleges and is growing at the rate of more than one new college a week. Sixty community colleges opened in the fall of 1968. Having developed its early strength in large California cities, it has spread to every state in the nation and become a stabilizing factor in much smaller cities and towns. In this respect, the community college shares a philosophy with the Folk Schools of Denmark, which developed in the mid-19th century

under the guidance of N.F.S. Grundtvig. The early folk high schools were opened to provide for the educational needs of the farmers and other local people instead of the wealthy elite. They were a focus of community activity, providing practical training and limited general education to many rural areas. Several thousand descendants of the folk schools exist in Scandinavia and other parts of Europe today. Although they issue no degrees and, in most cases, offer no credit, they are similar in spirit to the community college in the United States. In Norway, the Folkenhögskolen enroll 6,000 students in 500 schools. They serve students of the same general age group and similar academic aptitudes as the community colleges. They perform a similar function in bringing broad, general, and democratic education to communities that would not ordinarily have it.

As old as the community-folk school idea is, its acceptance as higher education has taken place almost wholly in the United States. Simultaneously with this rapid expansion of the community college in the United States, there has been a parallel expansion of the community college concept in other nations. Institutions incorporating several community college functions can be found in Japan, Canada, Chile, Colombia, Sweden, Australia, Ceylon, Great Britain, and most American Overseas Territories.

The community college idea is spreading rapidly throughout the world in both industrialized and developing nations. Its flexibility in adapting to varied cultural, political, economic, and educational environments has led B. Lamar Johnson to say, "Clearly this institution can have profound implications for education in other cultures" (14:8).

The junior college concept could be valuable in confronting two of the most important issues in international education: human resource development

and the revolution of rising expectations--what Philip Coombs has called "the world educational crises" (4:3).

Harbison and Myers rank 75 countries on a scale of development primarily derived from educational achievement (10:27). The statistics used are:

1. teachers per 10,000 in population
2. primary school enrollment
3. secondary school enrollment
4. scientists and engineers per 10,000 population.

On the composite scale, nations range from a composite score of .3 for Nigeria to 261.3 for the United States. Positive correlations of these scores with economic development statistics showed that educational development was positively correlated with economic development. The Harbison and Myers research has served as the principal document for those who see education as an investment in human capital. Because investment in human resources must be managed and planned, attention has focused on manpower needs in developing nations. What types of jobs will have to be filled to bring about the development that is sought?

In a paper delivered at the 1964 conference on "Education and Modernization of Nations," Harbison said

> The African countries are faced today with two basic manpower problems. The first is rising unemployment and underemployment, particularly. The second is shortage of high-level manpower to carry forward national development (9:468).

He divides high-level manpower into two categories. The senior category includes people in occupations normally requiring a university degree or its equivalent. The junior category includes those in jobs normally requiring one to three years past the secondary level, such as agricultural assistants, engineer-

technicians, laboratory assistants, and medical technicians. The ratio of junior- to senior-level jobs is roughly three to one. In other words, three sub-professional people are needed for every university graduate. The junior college has already proven itself able to provide technical manpower.

Examples of manpower needs can be further seen in the report of the Committee on Education and Human Resource Development. It states that a most crucial need in development plans is the modernization of agriculture. For most nations, agricultural strength is the first step in the development process, and, to modernize the agricultural sector, institutes of agriculture are needed. These in turn call for large amounts of middle-level manpower (3:52). The same report mentioned, as a possible alternative for provision of middle-level manpower, the expansion of the present sixth form (a pre-university course) to include more pre-vocational and technical programs. "The resulting institution might be roughly similar in program to the U. S. junior college," states the report (3:62).

Another issue on the international scene is the revolution of rising expectations. After World War II, educational systems the world over began a process of expansion unequaled in world history. Student enrollments doubled in many nations; money spent on education increased at an even faster rate; and, in many nations, education became the largest industry. With all this interest and expansion, one would expect a significant increase in the number of adult literates in the world. The population expansion, however, has managed to outstrip the educational expansion. In 1966, there were 460,000,000 illiterate adults--nearly 60 per cent of the adult population (26:10).

National educational systems have always been limited by scarcity of funds and by an unending need for expanded facilities and materials. Certain

factors in today's world, however, have intensified the concerns of all national educational systems. The technological, social, and economic developments since World War II have been explosive in both quantity and effect. The educational systems have grown at an unequaled rate, but have not kept pace with the faster-growing world around them. This disparity between the educational systems and their environment is the crisis. Coombs lists several factors that have intensified it:

1. the sharp increase in popular aspiration for education
2. the acute scarcity of resources
3. the inherent inertia of educational systems
4. the inherent inertia of the societies themselves (4:4).

If educational systems are to break out of this crisis, new approaches to education must be found. A modernization of educational management will have to take place. Perhaps the community college concept, with its use of non-formal education and flexibility of function, could be a means for providing increased opportunities, at least in the area of higher education.

It is clear that nations are aware of the importance of education in economic development and planning. Inherent in the demands facing most of them is the need for middle-level manpower (Harbison's "junior category" of higher education). Educational systems are being called on for increased flexibility. Based on its past success in areas of diverse need and extreme cultural differences, the junior college has a role to play in this international change of emphasis.

A LOOK AT JUNIOR COLLEGES IN EIGHT NATIONS

Australia

Education in Australia is a state concern. In 1957, however, with the Murray Report, the Australian Universities Commission emphasized the fact that the magnitude of university educational problems was such that they should be a concern of the commonwealth government. The Murray Report had a tremendous effect upon the universities' organization and structure. Since that time, as the interest of the commonwealth government in higher education has increased, it has also increased its financial commitment. The Report of the Future of Tertiary Education in Australia in 1964 (the Martin Report) has had a marked impact on non-university tertiary education.

The Martin Report recommended that education be available "to all citizens according to their inclination and capacity" and suggested that such a view served the needs of both individuals and the community (17:1). The report continued that the existing system, with too much emphasis on university education, resulted in many young Australians not being able to reach their potential.

Based on projected enrollment figures for 1975 of 125,000 students in universities and 123,000 students in non-university tertiary education, the Martin Committee recommended the establishment of new tertiary colleges at Bathurst, Wagga, Toowoomba, Rockhampton, Ballarat, Geelong, and Bendigo. These new institutions would operate independent of the university system and the teacher training systems.

The new institutions were named later in the Wark Report (29) on Advanced Education (August 1965) as Colleges of Advanced Education. The Wark Report suggested that the existing independent colleges be used as the base for an

entire system of advanced education colleges. In Victoria, Queensland, New South Wales, and Western Australia several colleges have been adapted to provide education as designated in the Martin and Wark Reports. In Tasmania, the first entirely new physical plant was started in 1967 by the state, the commonwealth government, and an American advisory team under Professor James D. MacConnell. This new college in Tasmania and the development of colleges of advanced education in Canberra and Bathurst appear to correspond most closely to the community colleges in the United States. A comparison of the community colleges of California and the colleges of advanced education in Australia was made in a doctoral dissertation by Raymond E. Meyer, at UCLA (21). Some of the similarities are shown in the table below.

Purposes

Proposed purposes: Australia	Expressed purposes: California
provide vocational education	provide vocational education
may provide liberal education	provide general education
may provide transfer education	provide transfer education
may provide adult education	provide adult education
	provide building use for community activities
	provide developmental education

College Characteristics

Australia	California
will provide two or more years leading to a diploma	provide two years leading to an A.A. degree

College Characteristics
(continued)

Australia	California
will provide day, extended day, and summer school classes for full- and part-time students	provide day, extended day, and summer school classes for all full- and part-time students
may provide counseling to assist students in selecting appropriate courses	provide counseling and guidance to assist students in making realistic choices from available programs
may provide close contact between the schools and potential employers	maintain close cooperation between the community employers and the college

There are several differences between the Australian colleges of advanced education and the community colleges of California. The following characteristics of California community colleges are not proposed for the colleges of advanced education:

1. provision of college buildings for the use of community activities
2. provision of developmental education
3. admission of any high school graduate or adult over 18 who might profit from more education
4. opportunity for transfer to other schools on completion of Associate of Arts degree.

Differences exist, but there are enough similarities to say that the two institutions fulfill roughly the same function, namely, providing a much broader range of educational opportunities to a larger segment of American and Australian youth. The Australian experience demonstrates the usefulness of the junior college concept to other nations in providing middle-level manpower.

Canada

The past ten years of Canadian educational history show the development of a strong junior college movement. It is centered principally in the Western provinces of Alberta and British Columbia. It is interesting to note that, while the junior college in its present form is relatively new to Canada, the term "junior college" has been used for many years to denote a school that offers less than four years of education and does not train teachers. In 1958, for example, there were 49 junior colleges listed in the government statistics. The list included, however, 40 convent or other church-related schools, three military preparation schools, and several technical institutes (20:400).

Several factors have limited the growth of these institutions in the nation that probably has its closest educational contacts with the United States. The first is the small number of college-age students. With the population of Canada staying just under 10 per cent of that of the U.S., the existing four-year schools have been able, until recently, to fill the demand for higher education. Other factors related to the low population are under-employment and the availability of European skilled workers. Industries and businesses in Canada have been short of personnel and in many cases have trained the needed employees on the job. Where skilled workers have been needed, the large number of immigrants from Europe has partially filled this need. Other factors include the rigidity of provincial control, the difficulty involved in using federal money locally, and the inclusion in the Eastern provinces of a one- or two-year Grade 13 in the secondary-school program.

In 1957, the first junior college opened its doors in Lethbridge, Alberta. It began by offering one year of university-level course work for students continuing at the University of Alberta. The college was able to plan for expansion and development with the passage in 1958 of enabling legislation by the provincial government. It continued to offer one year of university-parallel courses, but expanded into extended day and evening programs, offering such subjects as stenography, management, steam engineering, and tailoring. In 1961, the second year of university-parallel work was authorized, partly as a response to Lethbridge's pleas to take a greater role in raising the number of students in higher education. In 1963, 13 per cent of Canadian youth between the ages of 18 and 21 were enrolled in school. This compares with nearly 50 per cent of the 18- to 21-year-olds in the United States and to 80 per cent in some parts of California (28:190).

After 1965, four other junior colleges opened in Alberta--Mount Royal Junior College in Calgary and schools in Medicine Hat, Red Deer, and Grande Prairie. At the time of writing, a sixth school was being contemplated in Edmonton. All are offering programs of both occupational and transfer nature. In a dissertation on the potential of the junior college in other nations of the world, Daniel Walker said that the new schools have been developed by Alberta to serve three functions. The first is to encourage a higher percentage of students to attend college; the second, to reduce the pressure on four-year schools; and the third, to provide community services in terms of adult education (28:192).

In Alberta, the place of junior colleges seems assured, as reflected in a letter by Walter B. Pentz, President, Mount Royal Junior College: "I believe

the people and the legislature are favorably disposed toward further expansion of the community college system in the province." [Letter from Dr. Pentz, April 29, 1969]

British Columbia was the second province to develop junior colleges. In 1962, John B. MacDonald, President of the University of British Columbia presented a plan for higher education in British Columbia. In it he recommended the development of two-year colleges. Although the programs of these colleges were to vary somewhat from place to place,

> ...the objectives of two-year colleges might include one or more of the following: (a) two-year academic programmes for students who will either transfer to degree-granting institutions or will complete their formal education at this level; (b) technological and semi-professional courses designed for students...who do not plan to complete the requirements for a degree; (c) adult education, including re-education to meet the changing demands of technical and semi-professional occupations (16:51).

The new institutions became the subject of much debate in the teaching associations and in educational circles generally. In January 1963, Dennis C. Smith, Chairman of Higher Education at the University of British Columbia, stated in precise terms the role a community college would play in the British Columbia educational scheme:

> Presuming both an increasing population density and a plan for the decentralization of higher or continuing education, the community college fits into a pattern of functional differentiation, yet feeds the university through fluidity of transfer to that institution, while allowing the university to concentrate on upper-class education and graduate research (25:6).

The first to open was Vancouver City College in 1965, followed by Selkirk College in Castlegar the following year. In 1969 there were six colleges in various stages of development, all but one in temporary quarters. The movement seems

to be continuing and has led one observer to conclude that British Columbia is "the leader in the development of comprehensive two-year schools" (8:27).

Elsewhere in Canada there are junior colleges in Saskatchewan, Ontario, Nova Scotia, and Prince Edward Island. Although there are problems of finance and a lack of understanding of the educational potential of the junior college, a Canadian Commission for the Community College was created in 1968. From this initial organization, a Canadian Association of Junior Colleges might result. The current thinking among junior college supporters perhaps has been best phrased by John W. Gardner on the question of quality in junior college education: "The society which scorns excellence in plumbing because plumbing is a humble activity and tolerates shoddiness in philosophy because it is an exalted activity will have neither good plumbing, nor good philosophy. Neither its pipes nor its theories will hold water" (7:11).

Great Britain

In 1944 the Education Act in Britain called for the establishment of county colleges following the pattern of American junior colleges to provide for the increased educational needs anticipated at the end of World War II. Although these first community colleges were never built, from the Education Act came a series of institutions that, through the years, have come close to the community college concept. The colleges resulting from the direction of the Act provide facilities for post-secondary education for everyone over the legal school-leaving age (15) who is not otherwise enrolled in a secondary school. The schools, called "Technical Colleges," provide further education for students beyond secondary age outside the university or teaching colleges. They are local, area, regional, or national in support and participation. They offer

courses of an occupational character to part-time, full-time, and "sandwich" students.*

By 1966 there were 700 institutions of further education in Great Britain, with a total enrollment of 1.5 million students. Not all are similar to U. S. community or junior colleges, for this figure includes numerous specialized institutes training people for one occupation only and offering no training beyond secondary level. Several of them operate primarily to provide remedial work for secondary students unable to meet standard levels of achievement.

Although started as technical colleges, many of the schools now provide general education to balance the narrowness of technical programs. The general education usually includes history, literature, music, art, and social studies. Attending a technical college often makes it possible to study for and earn a B.A. or B.S. degree by sitting for a University of London external examination. It is more common, however, to attain one of the varied diplomas or certificates offered for the completion of specific courses in preparation for direct employment. A multiplicity of diplomas and certificates pervades most of British education, sometimes making it difficult to transfer from one occupation to another without undergoing more course work or earning a new diploma. The use of diplomas and certificates clearly contrasts with the use of the general A.A. or A.S. degree awarded by most U. S. institutions.

The technical colleges have shown much promise of expansion since the Industrial Education Act of 1964. The Act required each industry to provide the necessary training to ensure future employment needs. It has necessitated

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*"Sandwich" students are those participating in work-study programs. Released time is given by an employer for the purpose of further training and education. The students are "sandwiched" between work and study.

the close cooperation of industry and education, establishing many new courses for both part-time students and "sandwich" students. Today's technical colleges have three dominant characteristics that liken them to American institutions: a wide range of programs, a link between employer and institution, and a range of offerings from remedial education to university-level work.

Another institution in Great Britain has been catching the eye of the community college advocate. It is the newly developing sixth-form college. This institution resembles most closely the American private liberal arts junior college in that it gives two years of university preparation. The sixth form is the highest level of secondary education. It is commonly equated with one or two years of United States college education. The sixth-form colleges resulted from the difficulty many secondary schools had in providing the necessary facilities for students working for the advanced level, General Certificate of Education (GCE). The "A" level GCE normally takes two years after the "ordinary" level examination at about the age of sixteen. The Ministry of Education provided that local education authorities could pool resources and form schools that taught only sixth-form-level courses. There are still only a few of these new institutions operating, but Nigeria, Uganda, and Kenya are contemplating the creation of sixth-form colleges in the near future.

The existing sixth-form colleges in Luton, Croyden, Manchester, and Warwickshire share some of the physical, as well as the academic, characteristics of the American schools. They now offer both dormitory and day-school programs and some are co-educational, a rarity in most sixth forms. New plans for development include such U. S. innovations as a multi-purpose room for student mixing and program presentation. The concept of student interaction as a means of broadening educational experiences is in the forefront of the minds of many planners.

Japan

Although the term "junior college" was not formally adopted by the Japanese until 1949, "this level of education in a somewhat different format has existed in Japan since late in the 19th century" (22:13). In 1897, after the Sino-Japanese war, the educational code of Japan provided for special colleges that offered courses related to one professional field (18:13). These institutions, called senmon gakko, arose out of a need for advanced technical training caused by the war. The special colleges began to develop as sponsors of technical programs on a higher level than secondary education but below that of the university (18:13). The senmon gakko grew from about 75 to 350. Many filled positions remarkably like the technical institutes in the United States.

Two other types of institution serving this level of education developed in Japan before World War II: the koto gakko, almost exclusively university preparatory, and the shihan gakko, to prepare students for careers as teachers. These pre-war institutions were in effect three-year junior colleges (6:3).

In the post-war reconstruction period, education officers from the Supreme Command of Allied Powers reorganized the school system on a 6-3-3-4 basis, thus eliminating the junior college-level institutions. These were left to become either new universities or new secondary schools. Many of them could not meet standards for the universities and did not wish to become secondary schools. As a result, the University Chartering Committee recommended the development of junior colleges (6:6). It was not until W. Crosby Eells, a specialist in junior colleges, became education officer with the Supreme Command of Allied Powers (SCAP) that the modern junior college in Japan developed. Eells is often called the father of the Japanese junior college because of his role

in bringing about a restructuring of post-war education.

The junior college was "put into a trying situation politically, socially, and educationally" by the very process of being formed (30:21). Criticism came from both SCAP, which did not want to encourage institutions of Japanese origin, and from the Japanese educators, who did not want to include what looked like wholesale adaptation of yet another American institution. Further criticism stemmed from those who felt that a two-year junior college did not belong under the rubric of higher education.

Faced, however, with the pressure from the koto gakko, senmon gakko, and, increasingly, the joshi senmon gakko (women's post-secondary schools), and with the proselytizing done by Eells and Watanabe, the modern junior college was born and christened tanki-daigaku ("short" college, a term like our "junior" college and disliked for many of the same reasons) (28:199).

The junior college was not to grow and flourish overnight. It suffered growing pains as it struggled toward recognition and permanence. Junior colleges were first given a temporary status under provision of the education law (21:178). It was not until June 17, 1964, that this institution was given permanence by the revision bill passed in the Japanese Diet. From 149 temporary schools in 1950, it has grown to 450 with a total enrollment of over 68,000 students (31:29).

Most Japanese junior colleges are private women's colleges. The table below shows the distribution of institutions (30:28).

Founder	Men	Women	Total
National	24	--	24
Public	26	13	39
Private	108	242	350
TOTAL	158	255	413

Curriculum offerings, geared to meet the requirements of the new school education law, stress arts and sciences on the semi-professional level. The transfer function of the American junior college is present, although in nearly all cases junior college courses are terminal. Nursing, pre-school education, and literature lead in student enrollment. Technical programs are not available at present, but business and industrial courses have the second largest enrollment (19:15). One hundred three of Japan's two-year institutions offer evening courses for adults and young people in the community.

The Japanese junior college is clearly distinguished from its American counterpart in several ways. First is the predominance of women, who make up 70 per cent of the total enrollment. Second is the fact that about 80 per cent of all junior colleges are privately controlled. Third is the limited curricula offered by these schools, caused by both the size of the school and the limited funds. A fourth and last distinction made by O'Connell is that the tanki-daigaku is not the equivalent of an American community college, but is rather a junior college (22:187)--the difference being that junior college is a generic term describing a college primarily concerned with university-parallel courses, whereas community colleges are publicly supported, favor "open-door" policies, and serve their communities through broad, comprehensive curricula in occupational and university-parallel courses.

Three problems have been identified by educators in the Japanese two-year school:

1. failure to develop strong technical programs
2. lack of an effective transfer function
3. rigidity in curriculum offerings.

The failure to develop technical programs has resulted from the predominance of private women's colleges and is now attracting most of the junior college educators' concern. The terminal characteristic has resulted from insufficient curriculum planning to make a bridge between the two-year school and the university. The rigidity comes directly from the national curriculum regulations, which increase the tendency towards uniformity. Nevertheless, Japanese junior colleges have become permanent, have proliferated, and have carved a niche for themselves in the total educational system of Japan. They have demonstrated flexibility by being able to adapt to cultural and functional differences.

Ceylon

In 1965, the Minister of Education and Cultural Affairs of Ceylon visited the United States to study institutions of higher education. Among the institutions visited were the junior colleges of Southern California. The Hon. I.M.R.A. Iriyagolle was impressed with what he saw and "returned to Ceylon with renewed enthusiasm and determination to provide semi-professional education for his nation" (15:6). In 1966, Higher Education Act No. 20 was passed by the parliament giving legal status to the development of junior university colleges. This new institution was to fill a need in the Ceylonese educational system. Free public education in the elementary schools had made it possible for Ceylon to have a literacy rate of 90 per cent for ages of 10 to 25, second only to Japan. At the secondary level, over 400,000 students were in grades 9-12. The first levels of Ceylonese education were solid, extensive and effective in making places available to students. On the higher education level, however, the opportunities were much more limited, with only 25,000 of the 400,000 secondary

school students being able to enroll in any type of higher education. The universities took only 12 per cent of the advanced level GCE students. The use of such a small percentage of the available brainpower was a waste that Ceylon could not afford.

The junior university colleges are designed to educate many of the qualified students who could not get into the universities. Furthermore, they are designed to concentrate on areas of science and technology that are not traditionally studied in the universities. Emphasis is on providing middle-level manpower for industry, commerce, agriculture and government. In an article in the Ceylon Times, C. C. Collins said,

> The primary aim of the Junior College is the further democratization of education by extending it to beyond the secondary level. The Junior University Colleges will give higher educational opportunity to many high potential students who are presently barred from admission to the university system. The Junior University College will strive to meet the manpower needs of both the public and the private sector, emphasizing employment oriented rather than purely academic education that leads directly into job placement (2:2).

Unlike the junior colleges in the United States and Canada, the junior university colleges were not to be "open-door" colleges. With such large numbers of qualified students (several hundred thousand), it would have been impossible to provide places for them. Admission is limited to students with roughly the same qualifications as those entering the university. The atmosphere of the new schools is rigorous and practical, leading to mid-level employment. Students, however, who are awarded First Division passes on the Diploma examination at the end of two years of work will be admitted to any university in Ceylon, with advanced standing for the courses completed at the junior university college.

Numerous difficulties prevented the first five junior university colleges from opening in October 1967 as had been planned. In particular, problems in hiring technically competent faculty members--who would be drawn from more profitable business and government positions--were encountered. The problem of adequate physical facilities was also evident; no new construction was provided, but an attempt was made only to find existing facilities that might be converted for needed space. Also mentioned by C. C. Collins as problem areas were: lack of books in technical fields, finding qualified administrators, and fitting European-based occupational programs into the framework of an array of courses with general education.

The first five junior university colleges were located in Dehiwala, Kegalle, Galle, Palaly and Kuliyapitiya. A sixth has been established for women at the Uyanwatta Teacher's Training College at Polgolla. Others have been proposed in the Uva and Southern provinces. For 1970, new campuses are contemplated for Badulla, Auuradhapura, Trincomalee and Ratnapura. The new colleges will likely be single-sex.

Locations were chosen on the basis of regional population density, anticipated concentration of students, and availability of sites and building facilities. The programs for the five campuses at the time of planning are noted below:

Dehiwala	Kegalle	Galle
Personnel management	Sales and retail management	Auditing practices
Librarianship	English	Translation
Journalism	Translation*	Transport
English	Personnel management	Purchase and supply
Banking practices		

*Technical training in translation of foreign language material.

Kuliyapitiya	Palaly
Agriculture	Agriculture
Translation	Auditing practice
Bookkeeping	English
English	

Suggestions for other course offerings are: food service management, theatre arts, mid-level public administration, real estate sales, advertising art, refrigeration technology, fishery technology, public health and oceanography. None of these courses, however, has yet been added to the colleges.

The junior university colleges opened on February 2, 1969, with an enrollment of about 1,000 students. It is too early to predict their course, but it seems clear that a genuine desire to provide more educational opportunities through these colleges exists in Ceylon and that both staff and students are working hard to assure them a permanent place in the Ceylonese educational scene. In the words of Fredrick C. Kintzer, Fulbright professor 1968-69, "The Junior University Colleges are destined in the decades ahead to bring lasting benefits of great value to their students, to each of the cities and towns, hence to the Nation" (15:9).

Chile

"An outstanding example of the export of the junior college movement to to a developing nation of the world has been the junior college movement in the Republic of Chile," D. G. Walker writes (28:207). The junior college in Chile has developed in less than ten years. Chile is beset with the serious social, economic, and political problems common to many Latin American countries, but it is the first to make a concerted effort to tie education to economic needs through the junior college.

Chile developed regional colleges in an attempt to meet three needs. The first was the large number of secondary school graduates who passed their secondary examinations, obtained the Bachillerato, but failed to pass the separate university entrance examination. Here were large numbers of educated youth with broad, liberal arts backgrounds, but no training in the technical occupations needed. The second problem was the shortage of technical personnel. The needs of a developing economy can best be met, according to manpower planning advocates, by training the technical-level personnel that job projections call for. A third difficulty was the belief by ministry officials that higher education in Chile was the domain of only the higher socio-economic class. For a variety of reasons, lower-class students seldom received a higher education. One factor that perpetuated this condition was the centralization of most higher education ir Santiago. An historical examination of the founding of the university systems in Latin America shows, however, that one of the more recent and most significant trends has been the extension and decentralization of the university system from the capital cities to the regional areas. As noted in the Office of Education's publication, The Current Situation in Latin American Education, the popular demand for universities exists in each region or local area and every department or province desires its own university (11:25).

In 1957, in response to these pressures,a proposal was made that higher educational centers closely coordinated with the University of Chile be established to provide opportunities for continuing education and to develop new curricula. In 1959, after suggestions from a team of American educators, the Advisory Council of the University of Chile approved a document proposing the

creation of regional university colleges. Between 1960 and 1965, five colegios universitarios regionales were established: Temuco, La Serena, Antofagasta, Talca and Osorno. The functions of these five colleges are as stated in Irma Salas' "Master Plan 1965-1970 for the University of Chile's University Colleges" (13:10):

1. to provide opportunities for intermediate-level studies in accordance with national and regional needs

2. to provide opportunities for transfer to professional university schools

3. to give students basic training in the sciences for intermediate-level university courses

4. to provide general education courses in order to promote the development of the student as a whole

5. to provide guidance to the students in their educational and vocational pursuits in order to adapt them better to personal and to school situations and to promote their school achievement and future professional efficiency

6. to provide opportunities of formal education for adults; to carry out activities for the improvement of professionals; to promote and organize cultural activities to meet the interests and needs of the different groups of the community

7. to collaborate with the respective agencies in the study and utilization of regional natural resources.

The regional colleges are open to all students who possess the secondary-school-graduation certificate (Bachillerato). Relaxing traditional requirements and placing regional colleges in cities outside of Santiago have thus resulted in an increased enrollment from lower socio-economic levels (13:10).

The following list of programs offered by the college at La Serena is an example of the major fields of study in these colleges (23:10):

Professional university careers of intermediate level:

agricultural technician
home economist
industrial food-processing technician
statistical administrative technician
chemistry laboratory technician
draftsman
social service assistant
technical assistant

Transfer careers:

nursing
social welfare
state professor of English, French, biology, mathematics and fine arts

In master-planning these regional colleges, the University of Chile has been actively supported by the Center for the Study of Higher Education of the University of California at Berkeley, under the guidance of Leland Medsker. The work has been done with the help of a Ford Foundation grant and has accounted for much of the philosophy and theory of the colleges.

In a letter on the regional colleges, Dr. Medsker noted the following difficulties:

1. The faculties (departments) in the University of Chile are not all willing to accept transfers from the colleges.

2. The former rector of the University has cancelled some occupationally-oriented programs because they are not within the realm of proper university concern.

3. Early buildings were rushed in before adequate plans could be made; and there is need now for much improvement in laboratories, libraries and equipment.

A reform movement began in May 1968 and was still under way in August 1969, although a permanent president had not yet been elected. Much of the future of the centers will depend on the outcome of the current reforms. In

a letter dated October 2, 1968, Medsker said, "It may be that these centers will become autonomous institutions and, in fact, some of them may move towards becoming full-fledged universities." Of course most of this is conjecture, as a great deal depends on a new president's policies.

In summary, eight university colleges have now been set up with objectives similar to those of American junior colleges. They are experiencing many of the same difficulties that were present in American junior colleges in their first years of growth. "Terminal and transfer programs have been developed and students have sought these institutions in increasing numbers" (28:224). There seems little doubt that the colleges will survive; they might even become models for other Latin American countries.

Colombia

Colombia is a good example of a nation attempting to improve its economic situation by using both manpower planning and educational diversity. Although predominantly agricultural, the country is rapidly becoming industrialized--a significant part of the population lives and works in one of the 20 cities of over 100,000 population. The country is trying to increase its gross national product by more than its present 5 per cent per year. One way is by developing junior colleges capable of providing the necessary middle-level manpower. In 1965 Colombia needed 80 per cent more technicians; at the same time, moreover, the secondary schools were turning out 8,000 students per year in excess of the number of university places available.

In 1964, B. Lamar Johnson and James F. King conducted a study of higher education in Colombia. In it, they recommended a larger and more intensive

study in which Julio L. Bortolazzo and Otto Perez were to participate. The Bortolazzo study was completed in 1966. Then Perez's study "came out unequivocally for a strong stand for two prototype comprehensive junior colleges, or institutos universarios, to open in 1968" (13:12). A study group was then assembled to assist in setting up and developing a national plan for higher education in Colombia. This group, known as the University of California Colombian Higher Education Project, was concerned with setting up specific criteria and procedures. The report recommended that the institutos should:

1. be established as dependencies of accredited universities
2. offer both general education and pre-professional programs
3. have courses varying in length from a few weeks to a year
4. offer transfer opportunities to a four-year institution
5. offer extension programs for people in the community (13:12).

The first three institutos universarios are located in Bogota, Medillin, and Santander del Sur. They were converted from existing facilities (technical institutes) and were scheduled to open in 1969. The three new colleges will be staffed by 60 faculty members after they have received training at the University of California, Berkeley. On completion of the necessary course work on the administration and teaching of junior college students, they will return to Colombia and fill two functions--teaching in the institutos and also serving as staff members for the institutos' program as training centers for other new colleges. With the inclusion of junior colleges in the Master Plan of Colombian Higher Education, their future seems assured. Their development in both Colombia and Chile might serve as models for other Latin American countries seeking answers to similar questions.

Kenya

The establishment of a junior college in Kenya has been discussed and planned; this gives further evidence of the junior college's flexibility and usefulness in developing nations. In October 1962, an in-depth study was completed by the U. S. Agency for International Development (AID) team of Edmund Gleazer, Stuart M. White, Dale Tillery, and Leland L. Medsker (27:11). After a careful analysis of Kenyan manpower and educational needs, the team recorded the following impressions:

1. additional educational opportunities at the junior college level are critically needed
2. an experimental junior college offers advantages in meeting post-secondary educational needs
3. there is enough interest in the possibilities of the junior college in Kenya to justify an experiment.

With these impressions in mind, and after consultations with various Ministry of Education officials and contractors, the team recommended the establishment of an experimental junior college (which was to have been built in 1964). It would have most of the characteristics of an American community college--the curriculum would include occupational programs, university preparatory courses, and general education for all. The report further specified building plans, staffing needs, and total construction costs for the first five years of operation.

To date, however, no experimental school has been forthcoming. Perhaps this is due to the Kenyan expectation that a United States AID grant would provide the necessary funds, or because Kenya felt its needs in this area could best be handled by expansion of the Polytechnic in Nairobi. Another reason for lack of initiative could be the country's strong commitment to the British pattern of offering the equivalent of the first year of university in the secondary sequence. The project is not dead though. It is still under consideration and has certainly demonstrated that this type of institution could be useful in Africa as well as in Latin America and Asia.

THE EVOLUTION OF JUNIOR COLLEGES

In 1969 there were roughly five times as many junior colleges outside the United States and Japan as there were in 1960. A trend of major proportions is evident. One reads of new international developments in much of the current literature. There are national associations of junior colleges in the United States and Japan. The number of colleges abroad has been further increased by the junior colleges in the United States Overseas Territories of the Canal Zone, Guam, Puerto Rico, and the Virgin Islands. The most important question now is how to account for this rapid development. What needs are being met or nearly met through the use of this two-year school? The obvious place to start such a search is in the stated purposes of schools in the countries being studied. To make this information more readable, it has been compiled in the following table.

Country	Expressed purpose for development of junior colleges
Australia	1. to provide part of the additional 60,000 places needed at the tertiary level by 1975 2. to make education available "to all citizens according to their inclination and capacity "
Canada Alberta	1. to raise percentage of college-age students enrolled 2. to allow the universities to concentrate on graduate studies 3. to provide low-cost education to communities 4. to meet adult educational needs

Country	Expressed purpose for development of junior college
Canada (continued) British Columbia	1. to fill present gaps in the cities' educational programs 2. to offer educational opportunities to those with full-time jobs
Great Britain	1. to give technical training opportunities 2. to prepare students for GCE certificate
Japan	1. to train and educate women 2. to democratize higher education 3. to provide more educational opportunities 4. to develop technically trained manpower
Ceylon	1. to further democratize education 2. to assist in meeting mid-level manpower needs 3. to offer an alternative to the academic education offered by the universities 4. to provide needed additional spaces for qualified secondary-school graduates
Chile	1. to offer diversity of new occupational patterns for higher education 2. to increase the percentage of lower socioeconomic-level students in higher education 3. to train more students for semi-professional work 4. to decentralize higher education
Colombia	1. to provide the trained manpower required by a developing society 2. to provide places for qualified secondary students
Kenya	1. to provide a pool of skilled and technically qualified manpower 2. to provide additional educational opportunities at the post-secondary level

Several points can be made by analyzing the purposes listed in the above table:

1. all countries are using the junior college as a means of providing expanded educational opportunities

2. five nations see the junior college as a means of meeting the needs of increased middle-level manpower (technical and semi-professional occupations)

3. five nations view the junior college as a means of "democratizing" education or providing more educational opportunity for a wider band of the socio-economic spectrum

4. the junior college idea is flexible enough to permit such divergent purposes as the training and education of women (Japan) and the decentralization of higher education (Chile).

Another purpose in studying the historical development of junior colleges overseas is to determine what conditions appear necessary for their initial development. The several common conditions present in nations that started successful junior college movements are listed below.

1. Governmental leadership and support

The United States is unique among nations in the amount of local autonomy present in control of education. It is possible for local communities to plan and develop school systems that differ greatly from nearby communities. In such a situation, it is easy to establish local experimental schools without depending on support from either the state or national government. In no other country studied is such independent control of education possible; in all of them, some form of ministry of education is concerned with the planning, financing, and smooth operation of school systems. It may be on a national level, as in Ceylon, Chile, and Kenya, or it may be on the state or provincial level, as in Australia and Canada. Governmental control of finance, standards, and, in some cases, staffing mean that the job of establishing a new type of school is almost impossible without the determined support of the respective ministries.

Charles C. Collins, in opposing the suggestion that grass-roots local support for a junior college might be an alternative to ministry initiative, has said, "Basic development of the junior college idea is going to come from the top" (1:11). The ideal situation would be to have a dedicated, persuasive, professional educator with both long experience and close contact with the ministry of education working for junior college development.

2. An excess of secondary-school students seeking university admission

Before a junior college can begin, there must be more secondary-school graduates than places in the university or its alternative. This is necessary for two reasons: an excess of students first creates social pressures for increased opportunities; and second, provides a body of students willing to enter a new and untried institution. In Japan, pressure to enter universities is intense. Preparation for entrance examinations is begun by the parents when they select the kindergarten that their child will attend so that he will be able to go to the "proper" elementary and secondary school. The lack of enough space in the universities gives impetus to development of alternatives in higher education. In Colombia, there were 8,000 more qualified students than there were available places in 1965. In Ceylon, the number of students enrolled in all forms of higher education is 6.2 per cent of the total number of secondary school students. In Australia, planning may be able to avert the shortage of university places. Colleges of advanced education are under development now to meet the needs for an anticipated 248,000 tertiary-level vacancies by 1975.

3. Close cooperation between junior colleges and potential employers

This close link is especially important during the first years of operation when employment opportunities are being watched closely by various segments of

the population. An example is the British experience with technical colleges. One of the fundamental concerns in British technical education has been a direct link of employer to potential employee. This link was formalized legally by the creation of the Industrial Education Act of 1964. Experience has shown that schools that train and educate students for jobs that do not exist risk extinction and may in fact contribute to social instability. Among the potentially most explosive groups in Africa today are the partially educated school-leavers who no longer wish to remain in the rural areas, but who have not been trained properly for the jobs available in the urban areas.

4. A need for middle-level manpower

All the countries studied had a need for more individuals trained at the "technician" level, i.e., medical aides, clerical workers, industrial foremen, agricultural assistants. The need is especially great in nations like Kenya, Ceylon and Chile, who see the junior college as a means of providing some of the middle-level manpower necessary for economic expansion. If however, a nation already has the means to provide the necessary intermediate manpower, as the Kenyan government perhaps has felt, then a new institution, i.e., the junior college, will probably not develop.

WHY SOME NATIONS DO NOT HAVE JUNIOR COLLEGES

While the concept of a two-year college is appearing now in several nations, many have not initiated anything even remotely resembling the junior college. An appropriate question would be why more nations do not have this institution. Although the following list is by no means exhaustive, several hypotheses can be put forward.

1. Many nations are not at a stage of development that encourages experimentation in higher education

Many nations in Africa and Asia have not yet developed national universities. Higher education is limited to students who can be sent to colleges and universities abroad. The first priority for these nations is a firm elementary school base and a well-developed secondary system. Furthermore, the problem of lack of funds in developing nations creates a tendency to concentrate on familiar institutional forms, putting aside experimentation until more funds are available. The lack of innovation is not limited just to developing nations. As Adam Curle has said, ". . . in most societies for most of recorded time, education has been a reactionary force rather than a progressive one. Education, often closely associated with religion, has tended rather to hallow antiquity than to promote innovation" (5:33).

2. The slow growth of comprehensive education

The American junior college and the American high school are based on the premise that society benefits from having students of all levels and abilities in certain common courses. The growth of the comprehensive high school and the comprehensive junior college are new developments in the history of education. In Europe, such education is the subject of much controversy. In most of Europe and, throughout the Third World, wherever European patterns have been followed, students at an early age are put into separate school programs either by choice, examination, observation, or a combination of these factors.

In England, it is still the practice in some areas to administer an 11-plus examination to determine the type of secondary school one is to attend. For the few brightest students, their university admission is secure at age eleven. Most students find themselves in secondary schools that offer technical and occupational courses, usually terminal. Today the idea of a school that

offers both technical and academic education is not common at the secondary level; it is common to find only university-caliber education at the higher levels. Thus, the middle levels--higher than secondary and lower than university--are often simply left out.

Sweden has been the pioneer in developing a rationale for comprehensive education in Europe. Extensive research has "contradicted the widespread opinion that, everything else being equal, the outcome of instruction will be better in homogeneous than in heterogeneous classes" (12:99). As the trend toward universal secondary education continues, the pressures for alternatives to present opportunities in higher education will be felt. Given such a situation, the possibilities of establishing two-year colleges are greatly increased.

3. Distrust of "imported" institutions

Educationally, the 1950's were a time of institutional transition. It was common practice for the United States and other donor nations to build and staff nearly exact replicas of their own schools. Thus, a vocational school in Paraguay, a comprehensive high school in Nigeria, and a teacher training institute in Ghana were structured and operated as similar institutions were in other nations. It was thought that, since much of the economic success of the industrialized world was due to its educational system, one way of achieving such success would be to imitate the schools operating in it. Educators have realized recently, however, that schools cannot adequately serve a nation unless they are particularly suited to that nation's needs. It has been the task of educational planners to examine every aspect of the society and economy and then to determine the type of school that meets the precise matrix of needs. Various countries have different desired outcomes for

education as well as different resources for its development. A particularly American institution--such as the junior college--may not meet with approval in many other countries, since the theme now in most developing nations seems to be educational nationalism.

4. Lack of a "world view" in the junior college movement

The concept, or the philosophy, of the community and junior college movement has not received widespread international publicity. Discussion in the junior college community has been concerned primarily with internal questions and problems pertaining to the role of the junior college in American education and society. An analysis of the literature on the junior college reveals little of international interest--if articles on Japan and Canada are excluded, the information diminishes still further. There has been increased interest in the past several years, with the American Association of Junior Colleges taking the lead and, now that the junior college movement has reached a secure and important place in American education, perhaps attention can be directed to the important role it can play in international education. It is significant that 1970 has been designated "International Education Year" by the United Nations. Undoubtedly the junior college movement can use this theme as its call for new direction and interest in the junior college as an "international" institution.

REFERENCES

1. Collins, C. C. "Exporting the Junior College Idea." Junior College Journal, 38:10-14; April 1968.

2. _____ "The Junior University Colleges." Ceylon Times, December 7, 1969.

3. Committee on Education and Human Resource Development. Nigerian Human Resource Development and Utilization. New York: Education and World Affairs, 1967.

4. Coombs, Philip H. The World Educational Crisis: A Systems Analysis. London: Oxford University Press, 1968.

5. Curle, Adam. "Education, Politics, and Development." Comparative Education Review, 8:33; February 1964.

6. Eells, W. C. "Junior College Development in Japan." Junior College Journal, 22:3-11; September 1951.

7. Gardner, John W. "Quality in Higher Education." Current Trends in Higher Education, 1958. Washington, D. C.: National Education Association, 1958.

8. Grant, Lou S. "Canada's Evolving Two-Year Colleges." Junior College Journal, 37:25-27; February 1967.

9. Harbison, Frederick. "Problems of Developing Higher Education in the Newly Developing Countries." Selected Readings to Supplement H.R. 14643. Washington, D.C.: U.S. Government Printing Office, 1966.

10. Harbison, Frederick and Myers, Charles. Education, Manpower and Economic Growth. New York: McGraw-Hill, 1964.

11. Hauch, Charles C. The Current Situation in Latin American Education. Washington, D.C.: United States Department of Health, Education, and Welfare, 1963.

12. Husén, Torsten and Boalt, Gunnar. Educational Research and Educational Change: The Case of Sweden. Stockholm: Almqvist and Wiksell, 1967.

13. Jacobsen, Joseph M. "The Junior College Idea in South America." Junior College Journal, 39:9-13; November 1968.

14. Johnson, B. Lamar. "Is the Junior College Idea Useful for other Countries?" Junior College Journal, 32:3-8; September 1961.

15. Kintzer, Frederick C. "Accent on Action in Higher Education--Ceylon's New Junior University Colleges." Newsletter. United States Educational Foundation. Ceylon, March 1969.

16. MacDonald, John B. Higher Education in British Columbia and a Plan for the Future. Vancouver: The University of British Columbia, 1962.

17. Martin, L. H. (chmn.) Tertiary Education in Australia. Sydney: Commonwealth Government Printer. Vols. I, II, 1964; Vol. III, 1965.

18. Ministry of Education. Industrial Education in Japan. Tokyo Printing Bureau, Japanese Government, 1959.

19. Ministry of Education. Statistics Report of Junior Colleges. Tokyo, Higher Education and Science Bureau, 1966.

20. Mitchener, R. D. "Junior Colleges in Canada." Junior College Journal, 30:400-412; March 1960.

21. Meyer, Raymond E. California Community Colleges: Implications for New Colleges in Australia. UCLA,an unpublished doctoral dissertation,1969.

22. O'Connell, Alfred C. Junior College Education in Japan. Columbia University, an unpublished doctoral dissertation, 1965.

23. Regional University College at La Serena. College Catalog. La Serena, Chile, 1966.

24. Ricciardi, Nicholas. "Vital Junior College Problems in California." Junior College Journal, 1:24-27; October 1930.

25. Smith, Dennis C. "Community Colleges Are Really Needed." Community Colleges for British Columbia? Vancouver: The British Columbia Teacher's Federation, January 1963.

26. UNESCO. "UNESCO's Contribution to the Promotion of the Aims and Objectives of the United Nations Development Decade: Report by the Director-General." General Conference, Paris, October 25, 1966.

27. United States Agency for International Development. Recommendations Concerning the Establishment of a Junior College in Kenya, East Africa. A report of the survey team from the University of California, October 1962.

28. Walker, Daniel Gers. The Potential of the Junior College in the Developing Nations of the World. University of Southern California, an unpublished doctoral dissertation, 1966.

29. Wark, I. W. (chmn.) Commonwealth Advisory Committee on Advanced Education. Colleges of Advanced Education 1967-69. Canberra: Commonwealth Government Printers, July 1966.

30. Watanabe, Akira. "Genesis of the Japanese Junior College." Junior College Journal, 34:20-24; February 1964.

31. _____. "Junior Colleges Blossom in Japan." Junior College Journal, 37:28-34; February 1967.